Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1-2. (Canceled)

3. (Currently Amended) The treating solution ~~for surface treatment of metal~~ according to claim 18~~claim 1~~, further containing 1000 to 50000 ppm of a nitrate group.

4. (Currently Amended) The treating solution ~~for surface treatment of metal~~ according to claim 18~~claim 1~~, further containing at least one oxygen acid and/or salt of oxygen acid selected from the group consisting of $HClO_3$, $HBrO_3$, HNO_2, HNO_3, $HMnO_4$, HVO_3, H_2O_2, H_2WO_4, H_2MoO_4 and salts thereof.

5. (Currently Amended) The treating solution ~~for surface treatment of metal~~ according to claim 18~~claim 1~~, further containing at least one polymer compound selected from the group consisting of water-solublewater soluble polymer compounds and water-dispersiblewater dispersible polymer compounds.

6. (Currently Amended) The treating solution ~~for surface treatment of metal~~ according to claim 18~~claim 1~~, further containing at least one surface-activesurface active agent selected from the group consisting of nonionic surface-activesurface active agents, anionic surface-activesurface active agents and cationic surface-activesurface active agents.

7. (Currently Amended) A method for surface treatment of a metal comprising, contacting independently ~~each metal~~

~~material~~ or ~~simultaneously two or more~~ collectively at least one metal material~~materials~~ selected from the group consisting of a ferriferous material, a zinciferous material, an aluminiferous material and a magnesiferous material with the treating solution ~~for surface treatment~~ according to claim 18~~claim 1~~.

8. (Currently Amended) The method ~~for surface treatment of metal~~ according to claim 7, comprising, further contacting the at least one metal material ~~or the two or more metal materials~~ with an acidic aqueous solution of a compound containing at least one element selected from the group consisting of cobalt, nickel, tin, copper, titanium and zirconium, after contact~~contacting~~ with the treating solution ~~for surface treatment~~, with or without washing by water.

9. (Currently Amended) The method ~~for surface treatment of metal~~ according to claim 7, comprising, further contacting the at least one metal material ~~or the two or more metal materials~~ with a treating solution containing at least one polymer compound selected from water-soluble~~water soluble~~ polymer compounds and water-dispersible~~water dispersible~~ polymer compounds, after contact~~contacting~~ with the treating solution ~~for surface treatment~~, with or without washing by water.

10. (Currently Amended) A method for surface treatment of a metal comprising, electrolytically~~electrolytic~~ treating in the treating solution for surface treatment claim 18~~claim 1~~, wherein ~~independently each metal material or simultaneously two or more~~ the at least one metal material~~materials~~ ~~selected from the group consisting of ferriferous material, zinciferous material, aluminiferous material and magnesiferous material are~~ is a cathode.

11. (Currently Amended) The method for surface treatment of metal according to claim 10, comprising, further contacting the at least one~~the~~ metal material ~~or the two or more metal materials~~ with an acidic aqueous solution of a compound containing at least one element selected from the group consisting of cobalt, nickel, tin, copper, titanium and zirconium, after electrolytic treatment~~treating~~ in the treating solution ~~for surface treatment~~, with or without washing by water.

12. (Currently Amended) The method for surface treatment of metal according to claim 10, comprising, further contacting the at least one~~the~~ metal material ~~or the two or more metal materials~~ with a treating solution containing at least one polymer compound selected from water-soluble~~water soluble~~ polymer compounds and water-dispersible~~water dispersible~~ polymer compounds, after electrolytic treatment~~treating~~ in the treating solution ~~for surface treatment~~, with or without washing by water.

13. (Currently Amended) A method for surface treatment of metal comprising, contacting independently ~~each metal material~~ or ~~simultaneously two or more~~ collectively at least one metal material~~materials~~ selected from the group consisting of a ferriferous material, a zinciferous material, an aluminiferous material and a magnesiferous material, whose surface is not degreased and cleaned with the treating solution ~~for surface treatment~~ according to claim 6.

14. (Currently Amended) A metal material having a surface-treated~~surface treated~~ film containing at least one metal element selected from the group consisting of titanium and zirconium formed on a surface of an iron metal material by the method ~~for surface treatment~~ according to claim 7, wherein an adhesion amount of the surface-treated~~surface treated~~ film, calculated as the metal element, is 30mg/m^2 or more.

15. (Currently Amended) A metal material having a surface-treated~~surface treated~~ film containing at least one metal element selected from the group consisting of titanium and zirconium formed on a surface of a zinc metal material by the method ~~for surface treatment~~ according to claim 7, wherein an adhesion amount of the surface-treated~~surface treated~~ film, calculated as the metal element, is 20mg/m^2 or more.

16. (Currently Amended) A metal material having a surface-treated~~surface treated~~ film containing at least one metal element selected from the group consisting of titanium and zirconium formed on a surface of an aluminum metal material by the method ~~for surface treatment~~ according to claim 7, wherein an adhesion amount of the surface-treated~~surface treated~~ film, calculated as the metal element, is 10mg/m^2 or more.

17. (Currently Amended) A metal material having a surface-treated~~surface treated~~ film containing at least one metal element selected from the group consisting of titanium and zirconium formed on a surface of a magnesium metal material by the method ~~for surface treatment~~ according to claim 7, wherein an adhesion amount of the surface-treated~~surface treated~~ film, calculated as the metal element, is 10mg/m^2 or more.

18. (New) An aqueous surface-treating solution capable of treating independently or collectively at least one metal material selected from the group consisting of a ferriferous material, a zinciferous material, an aluminiferous material and a magnesiferous material, the treating solution containing 5 to 5000 ppm of a zirconium compound, calculated as metal zirconium, 0.1 to 100 ppm of free fluorine ion, at least one compound selected from the group consisting of 5 to 100 ppm of a calcium compound, calculated as metal calcium, 10 to 5000 ppm of a magnesium compound, calculated as metal magnesium,

and 10 to 5000 ppm of a strontium compound, calculated as metal strontium, and having a pH of 2 to 6.